

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

PROJECT INFORMATION

Project Title: Redevelopment of the Schaffer Wildlife Water

Project No. 10-520

Region/GMU: 5/36C

HPC: Tucson

Project Type: Redevelopment/New Water Catchment

Project Description:

This proposal will provide permanent long-term wildlife water in a major portion of Whitetail and Mule deer habitat on the Santa Margarita Ranch in southern GMU 36C. The site represents some of the best Whiteail, Mule deer and Javelina habitat in the unit. Water, however, is extremely scarce throughout this area and is only present in earthen stock tanks and livestock waters, but neither are year round sources. The project would be completed using an R-panel collection apron and two 4500 gallon storage tanks with a standard walk in drinker. A wildlife friendly fence will be installed around the development to exclude livestock. Providing water throughout the range also may potentially increase mule deer and javelina populations which will intern increase hunter opportunity. As stated by Marshal et al. (2006), (water) developments may reduce the need for seasonal movements, make a greater proportion of the range and its forage available to deer, reduce competition for forage in exploited range, decrease risks associated with long-distance movements (e.g., Nicholson et al. 1997, Bleich and Pierce 2001) and, thereby, increase deer abundance (Krausman and Czech 1998).

Wildlife Species to Benefit: Whitetail, Mule deer, javelina, small game and non-game species

Possible Funding Partners:

Implementation Schedule:

Beginning: September 1, 2010

Completed: June 30, 2012

NEPA Compliance: (Not Applicable)

Completed: Yes ____ No ____

Projected Completion Date:

PROJECT FUNDING

SBG Funds Requested: \$30,739

Cost Share Funds: \$20,000

Total Project Costs: \$50,739

PARTICIPANT INFORMATION

Applicant: Mark Frieberg

Telephone: (520) 762-8172

Address:

Arizona Game and Fish Department
555 N. Greasewood Road
Tucson, AZ 85745

AGFD Contact and Phone No. N/A

Coordinated with: Joe Currie (AGFD), and Tucson HPC

Date: 4-27-10

Applicant's signature:

Date: September 1, 2010

SEND COMPLETED APPLICATIONS TO:

(revised 7-02-2007)

AZ Game and Fish Department
Attn: Game Branch
5000 W. Carefree Highway
Phoenix, AZ 85086
rgregory@azgfd.gov

WAS PROJECT PRESENTED TO THE LOCAL HPC? YES X NO

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? IF SO WAS IT FUNDED?
No.

NEED STATEMENT/PROBLEM ANALYSIS:

Water developments in southern Arizona that offer year round water for wildlife are extremely important to overall populations, and reproductive success. In 1987 there was an AZGFD agreement with the Santa Margarita Ranch that six wildlife waters would be placed on two ranch pipelines and maintained year round for 15 years. Only one wildlife drinker was ever placed; and since that agreement expired, that drinker has not been maintained and frequently gone dry. The proposed plan, if funded, would be to develop a sustainable catchment at the same location. This catchment would have two storage tanks (almost 10,000 total gallons) and a metal collection apron large enough to sustain the new tanks in dry years. This plan would ensure that wildlife would have a dependable year round source of water. Water is a critical component of any deer habitat, and this area turns into seasonal use by Whitetail, Mule deer, javelina and other species, only when water is present due to ranch operations.

PROJECT OBJECTIVES:

- To increase deer and javelina populations by providing dependable, long term, self-sustaining, quality water sources and by increasing the use of otherwise unavailable forage resources
- To increase hunter opportunity
- To install a system that have a long lifespan (40-50 years for storage and collection systems, 25 years for drinking troughs)
- To install a system that does not require supplemental water hauling or major maintenance except in rare or exceptional circumstances
- To install a system that has minimal visual impacts and blend in with surrounding landscape

PROJECT STRATEGIES:

Each project will be completed in one of three ways:

1. Utilize big game special tag funds, personnel from the Arizona Game and Fish Department Development Branch, and approximately 15 volunteers to install this system.
2. Utilize big game special tag funds for the purchase of the system components. Development Branch would only be responsible for supplying 1-2 people for project supervision and for transporting the required supplies and specialized equipment to the site using the helicopter service. Nearly the entire project would be completed with volunteers.

Parts Breakdown

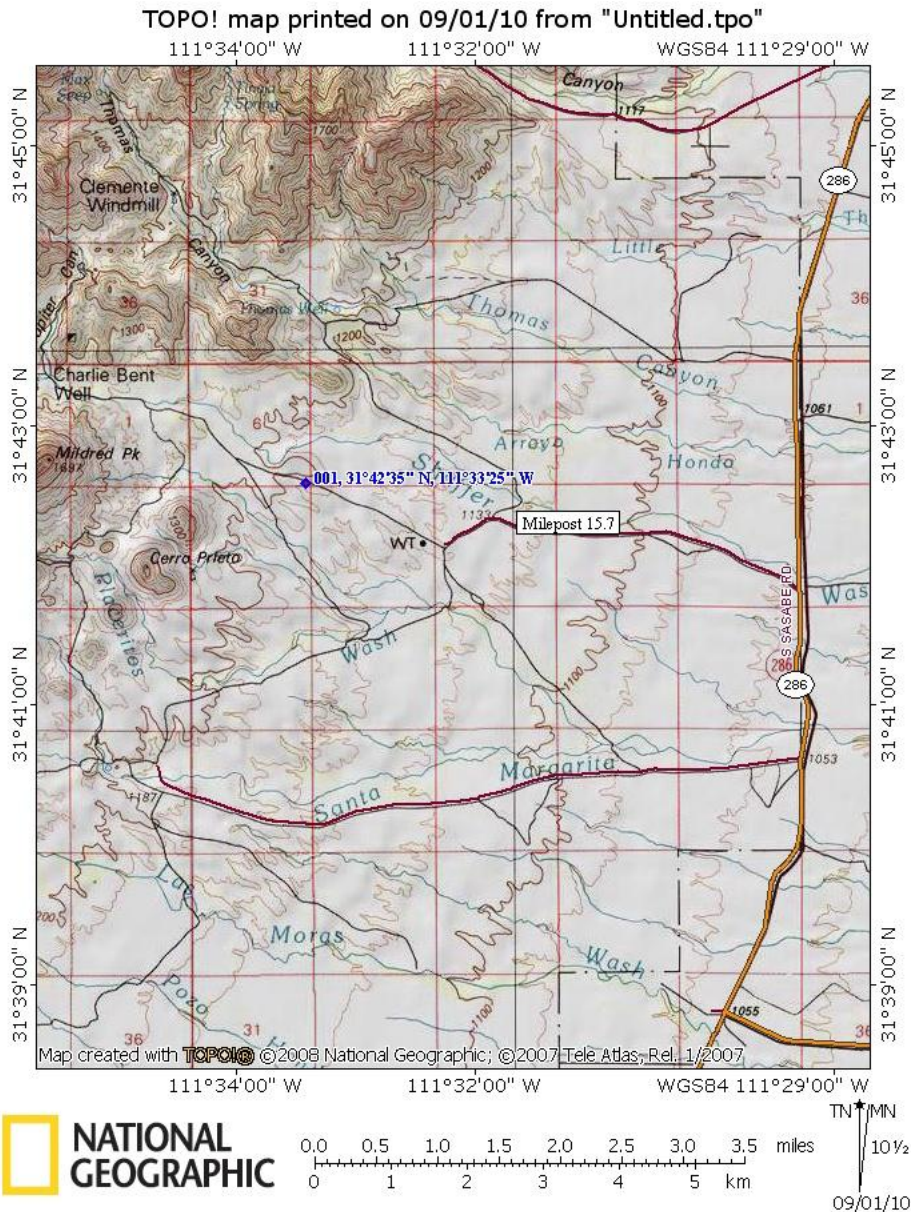
Mt Fagan wildlife water development.

- (2) 3'x16' fiberglass ring tanks
- (1) 3'x4' standard walk-in trough
- (1) 24'x72' R-panel collection apron
- 150'x150' wildlife friendly piperail fence
- Required plumbing components

PROJECT LOCATION:

The Schaffer Catchment site is located in southern GMU 36C. See below maps.





LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):

The project site is on land administered by the Arizona State Land Department.

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

N/A

HABITAT DESCRIPTION:

The main biotic community type and the site and in the vicinity is Semi-desert Grassland. Common vegetation includes various types of grama grasses (*Bouteloua spp.*), lovegrass (*Eragrostis spp.*) mesquite (*Prosopis spp.*)

(revised 7-02-2007)

and fairy feather duster (*Calliandra eriophylla*). Average rainfall is approximately 10-12" and the elevation is 3900'.

ITEMIZED USE OF FUNDS:

Item	Dimensions	Cost	Cost Share	Funds Needed
2-3'x16' fiberglass ring tank (7000g each)	3'x20' each	\$15,756		\$15,756
24'x72' R panel apron	24'x48'	\$5,380		\$5,380
3'x4' walk-in standard trough	3'x4'	\$3,300		\$3,300
Wildlife "friendly" livestock exclosure fence	150'x150'	\$3,000		\$3,000
Plumbing and misc. materials		\$1,000		\$1,000
Tax @ 8.1%		\$2,303		\$2,303
Labor- AZGFD and Volunteers		\$20,000	\$20,000	
Total		\$50,739	\$20,000	\$30,739

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

- Below is an all inclusive list of potential cooperators.
 - AGFD Development Branch: acquire the materials and provide equipment and minimal labor for construction if needed.
 - Safari Club International – volunteer labor and equipment
 - Arizona Deer Association – volunteer labor and equipment
 - Mule Deer Foundation – volunteer labor and equipment
 - Coues Whitetail.com chat room inquiries – volunteer labor and equipment
 - Tucson HPC: coordinate project funding opportunities

PROJECT MONITORING PLAN:

Water levels will be monitored at least twice per year with emphasis during the warmer drier months by the Wildlife Manager. Additional monitoring will be conducted as needed. Minor maintenance will also be conducted as needed by the Wildlife Manager. The AGFD Development Branch will be responsible for major maintenance issues.

PROJECT MAINTENANCE:

The maintenance of the catchment will continue to be the responsibility of the AGFD. The Wildlife Manager will be responsible for coordinating this.

PROJECT COMPLETION REPORT TO BE FILED BY:

Joe Currie or Mark Frieberg

WATER DEVELOPMENT PROJECTS (see attached worksheet):

TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (see attached worksheet)

ARIZONA GAME AND FISH DEPARTMENT WATER DEVELOPMENT WORKSHEET

PROJECT NAME: Mt Fagan Wildlife Water Catchment

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”**
Yes
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
Joe Currie – 4-27-10
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
___2-4 ___4-6 ___6-8 ___8-10 __X__10-12 ___12-14 ___14-16 ___>16
- 4) **Is there a perennial water source available to big game within four miles of this project?**
___YES (please complete #5 below) __X__NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**
Name of water source:
Type of water source (catchment, spring, dirt tank, etc.):
Ownership of water source:
Distance in miles from project:
- 6) **Is the target wildlife species a result of transplant efforts?** ___YES __X__NO
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.**
N/A
- 8) **Please provide the following information about access to the proposed site:**
Type of access (mark one): __X__2x4 vehicles ___4x4 only ___foot only**
**If foot access only: Distance in miles: Approx. hiking time:

-- Does access to this site require crossing private or tribal lands? ___YES __X__NO

-- Please describe any restrictions to public access: The site has reasonable public access.
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**
-see next page

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2-3'x16' fiberglass ring tank (7000g each)	3'x20' each	\$15,756		\$15,756
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Total		\$50,739	\$20,000	\$30,739

10) Was a site visit completed? ☒ Yes ☐ No

Joe Currie, Geoff Hossack and I conducted a site visit on 4-26-10.